

## **ABSTRACT**

Method animal subject from lethal infection with Bacillus anthracis (B. anthracis) are provided. One method comprises administering B. anthracis lethal factor (LF) or an immunogenic fragment thereof to the subject. A second method comprises administering LFor an immunogenic fragment thereof and the B anthracis protective antigen (PA) to the subject. A third method comprises administering a polynucleotide which encodes B. anthracis LF or an immunogenic fragment thereof to the subject. A fourth method comprises administering a polynucleotide which encodes LF or an immunogenic fragment thereof and a polynucleotide which encodes the B. anthracis PA to the subject. The present invention also relates to a protein or peptide based-immunogenic composition for preparing a vaccine which is capable of prophylactically protecting a subject against lethal effects of infection with B. anthracis.